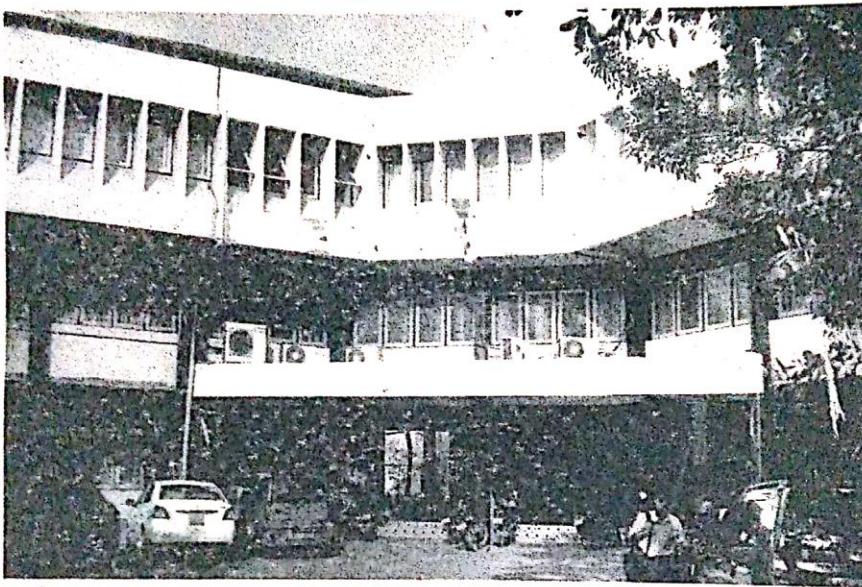




# University of Colombo



## INTRODUCTION TO DEMOGRAPHY (DMG 1101)

*Study Guide*

*Faculty of Arts*

Department of Demography

**INTRODUCTION TO DEMOGRAPHY  
(DMG 1101)**

UNIVERSITY OF COLOMBO  
FACULTY OF ARTS

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## CHAPTER FIVE

### Migration

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#### Learning outcomes

At the end of this chapter the student will be able to:

- Study migration as a major component in demography
- Evaluate the basic concepts, definitions and theories of migration
- Analyze factors which determining migration
- Describe and calculate the basic measurements of internal and international migration

#### 5.1 Introduction

Migration studies are a key area in the subject of demography. It contributes to the growth of the population in any country or region. This chapter describes migration as a major component of the subject of demography along with the factors determining migration. Concepts, definitions and major theories of migration can be used to introduce the subject of migration for beginners. The learning process can vary from person to person and is a selective process. It is important to identify separately the international and internal migration patterns and basic measurements related to international and internal migration.

#### 5.2 Objectives of this chapter

- To offer the student a sound knowledge on migration
- Develop skills about basic measurements of migration and their applications



### 5.3 Migration as a major component of the subject of Demography

Migration causes changes in population from time to time. As fertility and mortality determine the natural increase, immigration and out migration determine the migratory increase. It means that migration contributes to the growth of population. For example in Sri Lanka, from 1871 to 1881 inter censal period migratory increase has contributed more to the growth of the population than the natural increase. When the population distribution of the administrative boundaries in Sri Lanka is analysed, it is obvious that the total population in some districts are greater than in other districts. Some people migrate (move) more than others. Although theoretically any person can move or migrate from one place to another, the pattern of movement differs from person to person. There are reasons for these differences, eg. Highly educated people migrate more than those who have not achieved such professional expertise. Age, sex, marital status etc. are the demographic, socio-economic determinants of migration. The importance of studying migration is that it helps to determine the population distribution in a country.

### 5.4 Concepts and definitions

It is important to study the concepts and definitions of migration. These will be very useful for beginners in studying migration.

#### 5.4.1. Migration

Migration is a form of geographical or spatial mobility involving a change of usual residence between clearly defined geographic units (United Nations 1956).

#### 5.4.2. Migrant

A person who moved from one country to another

^ A mover from one administrative area to another

Mover from one place to another

#### **5.4.3. Lifetime migrant**

A lifetime migrant is one whose current area of residence is different from his/her area of birth, regardless of intervening moves.

#### **5.4.4. Area of origin**

The area from which a migrant moves.

#### **5.4.5. Area of destination (arrival)**

The area to which a migrant moves.

#### **5.4.6. In-Migrants**

Every move is an out-migration with respect to the area of origin and an in-migration with respect to the area of destination.

#### **5.4.7. Out migrant**

An out migrant is a person who departs from a migration-defining area by crossing its boundaries to a point outside it, but within the same country.

#### **5.4.8. Immigrant**

A person who is an international migrant entering the area from a place outside the country.

#### **5.4.9. Emigrant**

A person who is an international migrant, departing to another country by crossing the international boundary.

#### *5.4.10 Net migration*

The balance between in-migration and out-migration is called net migration. According to the direction of the balance, positive or negative net in-migration or net-out migration is characterized.

#### *5.4.11 Gross migration*

The sum of in-migration or out-migration ignoring the signs is gross migration.

#### *5.4.12 Return migration*

A return migration is the move of a person back to the area where he/she formerly resided before becoming an out migrant from that area.

#### *5.4.13 Urbanization*

This term refers to changes in the proportion of a unit's population which is urban. This term is also often used to indicate the level of population concentration in an urban area as well as the tempo of change in population concentration. Urbanization always encourages people to migrate. Therefore, migration and urbanization has a very good relationship.

#### *5.4.14 Internally Displaced Persons ( IDPs)*

Internally Displaced Persons are "Persons or group of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of the armed conflicts, situation of generalized violence, violation of human rights or natural or manmade disasters and who have not crossed an internationally recognized border" (Guidelines Principles on Internal Displacement of 1998).



#### **5.4.15 Refugees**

Refugees are persons who flee to escape conflict, persecution or natural disaster, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of their nationality, and is unable to or, owing to such fear, is unwilling to avail him/herself of the protection of that country (from wikipedia, the free encyclopedia).

#### **5.5 Sources of data on migration**

Sources of data are very important when measuring migration. Therefore, having a better knowledge of sources of data is important in migration studies. Since migration is quite a difficult entity to measure, one should have clearly defined migration to suit the study interest and find data from recognized sources. This can be mainly from the following sources:

1. Population census
2. Sample Surveys
3. Population Registers
4. Other Sources- Data from department of immigration and emigration, Port statistics, Ministry of Foreign affairs, population divisions available in some countries, data available at the Customs.

Population census, population registers and other data sources can be used to study international migration. In the population census several questions can be asked directly about migration. Eg. place of birth, place of last residence, duration of residence at present, place of usual residence etc., reason for migration from the place of last residence and duration of residence at the present place etc. Some countries include a separate question in the census questionnaire to get information of the original country. In such occasions, one can obtain information about international migration. In the Sri Lankan Census of 2001 there were four questions on the district of birth, district of usual residence, duration(in years) of residence in usually residing district, district of previous(last) residence. For internal migration population censuses, population registers and sample surveys can be used. These are particularly to get information on internal migration.

## 5.6 Theoretical views on migration

Writers who have made contributions to the study of migration say that migration is a difficult process to measure because it can be defined in a variety of ways to suit the study of interest. Also it may be repeated several times within the lifetime of an individual unlike birth and death which occur only once. Most definitions use time and space criteria and thus the moves which are included in the migration process are generally considered to be at least semi-permanent and takes place across definite geographical boundaries. Accordingly, Lee (1969) describes migration as a “permanent or semi permanent change of residence”. Mangalum (1968) calls it a relatively permanent moving away of a collectively, called migrants from one geographical area to another. The above statement provides a clear definition on time factor.

Wilbert Zelinsky formulated a hypothesis of mobility transition in 1971, trying to relate all aspects of mobility to the demographic transition and stages of modernization. He further states “there are definite patterned regularities in the growth of personal mobility through regularities comprises an essential component of the modernization process” (Zelinsky 1971)

### 5.6.1 Ravenstein's laws of migration

In the 19<sup>th</sup> century people migrated to Wales in England in large numbers as it was an urbanized area. Based on that movement, Ravenstein (1885) presented the theory of “Laws of Migration”. His laws of migration can be summarized as follows:

1. Migration and Distance – Migrants who travel long distances will tend to go by preference to one of the great centers of commerce and industry.
2. Migration by Stages - Inhabitants tend to move first towards nearby towns and eventually gravitate towards most rapidly growing cities.
3. Stream and counter stream
4. Urban-rural differences in propensities to migrate
5. Technology, communication and migration

(Ravenstein, 1885)

### 5.6.2 Lee's Theory of migration

Lee's theory of migration (Lee, 1966) is very important in the context of theories of migration. Lee has attempted to develop a general schematic framework for analyzing the volume of migration, the development of streams and counter streams and the characteristics of migrants. He begins with a broad definition of migration simply as "a permanent or semi-permanent change of residence and goes on to note that "no matter how short, how long, how easy, or how difficult, every act of migration involves an origin, a destination and intervening set of obstacles (Lee, 1966, p.49).

Following are the major factors as stated:

1. Factors associated with the area of origin
2. Factors associated with the area of destination
3. Intervening obstacles
4. Personal Factors

### 5.7 Factors determining migration

Usually no one likes to change his/her place of residence for no reason. But people do migrate and there are definite reasons for migration. People from all parts of a country may migrate to other countries. The only difference in migration is that in some countries the rate of migration is greater than others. Sometimes many factors combine to make people to take the decision, to migrate. These factors can be identified as 'pull' and 'push' factors. Pull factors include better education, health, better income etc. whereas push factors include loss of job, accommodation, war threats, instability of economy of the country, natural disasters etc. Some of the major factors determining migration are as follows:

- Economic
- Demographic
- Geographic



- Social/ cultural
- Political
- Other factors

Economic factors are the major factors in determining migration. People leave the country, state, district etc. for better economic opportunities. Some people migrate to find a better livelihood. According to Thompson and Lewis it is merely recognition of the fact that the most important cause of migration during the great emigration from Europe was the desire to improve economic status. Demographic factors determining migration are age, sex, marital status, density of the population etc. For example young people migrate more than other older folks; unmarried people migrate more than married people. Another factor determining migration is the geographical factor. People like to migrate where there is a better climate. People do not like to settle in places that have geographical disturbances such as natural disasters or natural threats from the environment. People wish to settle or migrate to places which are comparatively safe and with an attractive climate. Social factors are also responsible for determining migration. People prefer to maintain good social status in the society. Having better health facilities, better education, maintaining living standards are social determinants of migration. Religion, race, social customs also determine migration. Since this is a sensitive issue for many of the people in the world, it also has an effect on determining migration. Usually people do not wish to migrate to places where social customs, religious attitudes and cultural heritage are vastly different as it is almost impossible to adjust. The preference, therefore, is always is to migrate to places of similar social religious and cultural heritage. Political factors are also responsible for determining migration. This is a kind of forced migration caused by development projects carried out by the country, reducing the population pressures in some areas, settling displaced persons due to war and natural disasters etc. These decisions for migration are taken by the State. Therefore such types of migration are known as forced migration. Some of the other factors determining migration are distance of destination, attachment to the nature and place of work, travelling expenses, capacity and will power, migration laws, social condemnation and discouragement by receiving country.



## 5.8 Types of migration

There are two major types of migration.

- International Migration
- Internal Migration

### 5.8.1 International migration

International migration plays a role as a component of growth of the countries' population and refers to movement across national boundaries. It has become a main component of population growth in some countries. For example between 1851 and 1861 the population of Australia almost trebled, largely owing to an influx of migrants (Lucas & Young, 1994).

The following can be identified as different patterns of international migration:

1. Developing countries to developed countries
2. Developing countries to developing countries
3. Developed countries to developed countries
4. Developed countries to developing countries

Migration of population is an international phenomenon. The people used to migrate in the past as well, but these days there is an increasing trend of migration of people from developing countries to developed countries resulting in brain drain. Usually qualified competent and healthy people migrate in search of jobs and for improving their life and careers. The age of migration is usually youth when there is over zealotness to work hard. Male migrants are always more in numbers than female migrants.

There are factors which encourage migration, while many others do not. In migration social, economic and political factors combined together put a lot of pressure. In every country there are laws which deal with migration.

#### 5.8.1.2 Method of measuring international migration

**Immigration Rate:**

$$\text{Immigration rate} = \frac{\text{Immigrant population}}{\text{Mid year population}} \times 1000$$

**Emigration Rate :**

$$\text{Emigration rate} = \frac{\text{Emigrant population}}{\text{Mid year population}} \times 1000$$

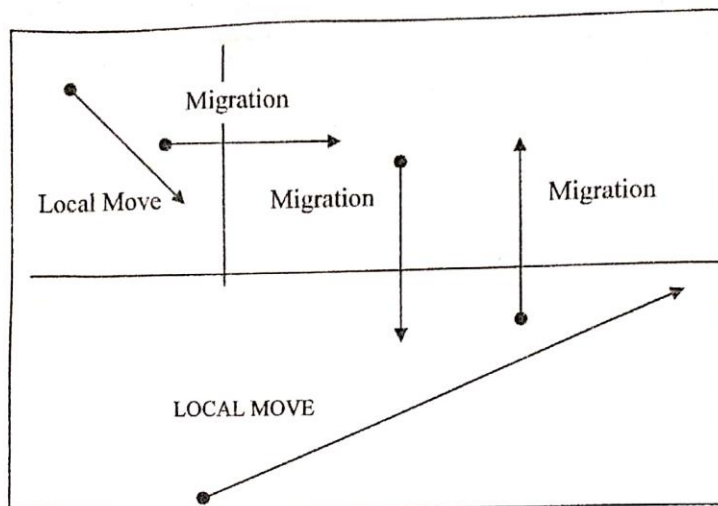
**International Net Migration Rate**

$$\text{International Net Migration Rate} = \frac{\text{Immigrant population} - \text{emigrant population}}{\text{Mid year population}} \times 1000$$

**5.8.2 Internal migration**

Internal migration is the migration of persons within a country. When the people of one country migrate from one place to the other, without crossing the boundary of the State itself, it is called internal migration (Hans Raj, 2006). The operational definition of migration, as well as change of residence from one civil division to another means that moves, such as those which are made from points close to the boundary line in an adjacent division, are also counted as migratory movements, whereas a number of movements covering longer distance, such as those from one end of the division to another, are not counted as such (Bhende A., Kanitkar, T. 1978). These two points are illustrated in the following figure.

**Figure 5.1 : Size and shape of migration defining areas**



Source: Donald J. Bouge (1969)

A migration is defined as a move from one migration- defining area to another (or move involving some minimum specified distance) made during a given migration interval and involving a change of residence. A migrant is a person who has changed his usual place of residence from one migration defining area to another (or one who has moved some specified minimum distance) at least once during the migration interval.

There are four types of internal migration all over the world.

1. Rural to rural
2. Rural to urban
3. Urban to rural
4. Urban to urban

#### **5.8.2.1 Methods of measuring internal migration**

There are two ways of measuring internal migration.

- A. Direct measures
- B. Indirect measures

#### **A. Direct measures**

The data for the first category is obtained from the direct questions put to the migrants during a census. For estimating migration questions are asked about a person's duration of

residence, place of last census, place of birth etc. With the help of the information obtained, the population is classified as life time migrants and non migrants. Life time migrants are persons who are enumerated in the same place where they were born. The place of birth statistics can also be used for measuring rural-urban migration.

The following figure shows life time migrants as well as non migrants.

**Figure 5.2 : Identifying life time migrants and non migrants**

Place of usual residence Place of birth	A	B	C	D	E	F
A	NM					
B		NM				
C			NM			
D				NM		
E					NM	
F						NM

*Note: NM = Life time non-migrants*

When a person's place of birth and place of residence is the same he/she is a lifetime non migrant. But when a person's place of birth is in district A and place of residence at enumeration is in district B he/she is a life time migrant.

The following can be identified as a direct measurement of migration with the use of direct questions regarding migration.

#### **In-migration rate**

$$\text{In-migration Rate} = \frac{\text{No. of in-migrants}}{\text{Mid-year population}} \times 100$$



Eg. In 1981, the number of migrants to the Colombo District was 333,257. The mid year population in the same year in the Colombo district was 1,699,241. The in-migration rate was 19.6/100.

#### **Out-migration rate**

$$\text{Out-Migration rate} = \frac{\text{No. of out-migrants}}{\text{Mid year population}} \times 100$$

Eg. In the year 1981, the number of out migrants to the Colombo district was 250,259. Mid year population in the same year was 1,699,241. The rate of out-migrants in Colombo District was 14.7/100.

#### **Total migration rate**

The total migration rate is the gross migration (total of in-migrants and out-migrants) divided by mid year population into hundred.

$$\text{Total Migration Rate} = \frac{\text{In-migrants} + \text{Out-migrants}}{\text{Mid year population}} \times 100$$

Eg. In the year 1981 the total migration rate in Colombo district was 34.3/100. In-migration rate was 19.6 and out-migration rate was 14.7. Total migration rate was 34.3.

#### **Net migration rate**

$$\text{Net Migration Rate} = \frac{\text{In-migrants} - \text{Out-migrants}}{\text{Mid year population}} \times 100$$

## **B. Indirect measures**

There are two main methods for estimating migration by using indirect methods.

- Balancing Equation (the use of vital statistics)
- The survival ratio method (the use of estimates of the probability of survival)

### **Balancing equation method**

The population of any place increases due to excess birth rate over death rate, as well as due to migratory movements.

$$M = (P_i - P_o) - (B - D)$$

Where M stands for net migration

P<sub>o</sub> stands for population at earlier census

P<sub>i</sub> stands for population at later census

B stands for number of births in that area during the two censuses

D stands for number of deaths in that area during the same year

From the above equation the total net migration for a country or a region can be measured.

In developing countries, however, the data on births and deaths obtained from vital registration system may be not accurate and adequate, and hence are of poor quality. The errors in the reporting of births and deaths therefore affect the estimation of net migration based on this approach.

### **The survival ratio method**

Another indirect method of internal migration measurement is the survival ratio method. It is based on survival probabilities between two census operations. The information is derived by sex, as enumerated in each area in two successive census operations.

**Key terms:**

- Area of Destination
- Area of Origin
- Balancing Equation Method
- Direct measurements
- Emigration
- Forced migration
- Gross migration
- Immigration
- In direct measurement
- Internal migration
- Internally Displaced persons ( IDPs)
- International migration
- Intervening obstacles
- Lifetime migrant
- Migrant
- Migration
- Natural Increase
- Net migration
- Non Migrants
- Population Concentration
- Pull factors
- Push factors
- Refugees
- Regional migration
- Survival Ratio Method
- Tempo of change
- Urbanization

Recommended readings:

Donald J.Bogue (1968), *Principles of Demography*, John Wiley & Sons Inc., United States.

Lucas,D. & Young, E.( 1994), "International Migration", in D.Lucas & P.Meyer (eds), *Beginning Population Studies*, Canberra: Australian National University.



**Model questions:**

1. Explain the determinants of internal migration in a country citing examples from Sri Lanka.
2. Explain the importance of a demographic sample surveys and international migration statistics when studying internal and international migration of a country.
3. i) What is meant by the term 'Migration'?  
  
ii) Examine the factors that influence the internal and international migration.
4. The population distribution by place of birth and residence for the country X is given below. Using the data, calculate the measures of migration for each district as given below.

Place of usual residence Place of birth	A	B	C	D	E
A	26250	865	1020	303	1213
B	408	24660	715	468	563
C	755	1345	45400	510	418
D	663	1198	335	48063	1545
E	1415	465	508	160	20235

- i) Life time in-migrants
- ii) Life time out-migrants
- iii) Life time net migration
- iv) Life time gross migration

5. i) The population of the country X was 1,058,000 in 1992 and it increased to 1,460,000 in 2002. According to the vital registration system of the country, the number of birth and deaths registered during this period were 750,000 and 82,000 respectively. Using the Balancing Equation Technique estimate the net migration of the country X for the period from 1992-2002.
- ii) Based on the above results what is your opinion about the migration patterns of country "X" in 1992-2002.